

Manpower Required

Introduction

It seems to be true that many companies have difficulty establishing the link between people and work. The purpose of this page is to introduce the model we have developed which shows what the current state of play in an organisation is. The model developed needs to be set in an established base period: at the moment we would use 2009/10. Of course, like all of the models being shown on this site, it is relatively simple to update and customise at any time.

Example

- Say the company has 5,000 employees
- Working days per employee per year 242
- The company is fully meeting its output targets

From this information it is not difficult to see that the total man days available amount to $5,000 \times 242 = 1,210,000$ days

By then taking into account the following factors

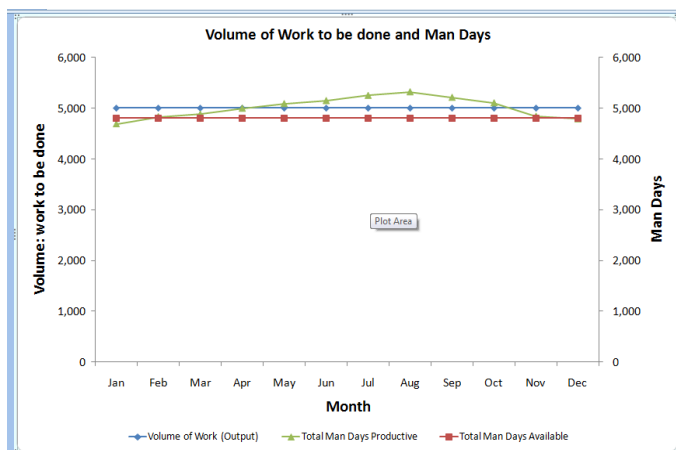
- Total man days taken for training and conferences
- All sickness (recorded)
- Holidays
- All other absenteeism

You end up with a figure of the actual man days to make the business work. Any improvement (less time required) for our deductions will give the business more productive time. But it does not need it as it's already operating at 100%. This means that every 242 days saved represents 1 person less that you need.

Now if the business is growing then reduction in our absence areas could well provide sufficient extra manpower thus offsetting the need to recruit further employees.

If you think this example might be a bit academic, consider the recent case of BT which recently announced that it was having to get rid of 15,000 employees: they represent around 10% of the existing work force. Such a retrenchment suggests that manpower planning at BT might not be so sharp as it is going to attempt to shed the 15,000 employees by way of natural wastage rather than compulsory redundancies. (See the following page for further details <http://news.bbc.co.uk/1/hi/business/8049276.stm>)

Here are some screenshots from the basic model prepared to help with assessing manpower requirements.



Excel Master

The above chart is based on the following table; and you can see it has been simplified for the purposes of demonstration:

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Volume of Work to be done and Man Days												
2													
3		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
4	Volume of Work (Output)	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
5	Total Man Days Available	4,800	4,800	4,800	4,800	4,800	4,800	4,800	4,800	4,800	4,800	4,800	4,800
6	Total Man Days Productive	4,686	4,827	4,879	4,995	5,085	5,146	5,247	5,319	5,210	5,101	4,836	4,785
7													
8	Employees	30	30	30	30	30	30	30	30	30	30	30	30
9	Hours per day	8	8	8	8	8	8	8	8	8	8	8	8
10	Days per week	5	5	5	5	5	5	5	5	5	5	5	5
11	Weeks per month	4	4	5	4	4	5	4	4	5	4	4	5
12													

In order to prepare the above table that is used to prepare the chart, the following detailed collection work sheet is required: you simply enter this information in your copy of the work sheet once you buy it.

	A	B	C	D	E
1	Manpower Requirements: deductions data				
2					
3	Inputs	Training Days	Sickness Days	Absenteeism for Other Reasons	Holidays
4					
5	Total Deductions	341	374	321	1250
6					
7	Employee				
8	A	15	9	2	25
9	B	9	15	3	25
10	C	0	10	0	25
11	D	6	14	11	25
12	E	0	3	9	25
13	F	3	14	5	25
14	G	13	12	1	25
15	H	9	6	15	25
16	I	1	10	5	25
17	J	13	3	5	25
18	K	6	9	2	25
19	L	9	3	10	25
20	M	9	5	5	25

In this final screenshot we can see that each employee's work record for the period is summaries on each line and the totals provided for the table in the preceding screenshot.

Conclusions

Finding the number of people required to run an organisation is not especially difficult providing the necessary records are kept and analysed. As we can see in this page, all we need to do is to summarise the absence data for each employee and by comparing that with the output and available man days we can derive the manpower shortfall or over supply.

What you get when you buy

When you buy this manpower planning module this is what you will receive

- the full and complete Excel 2007 version of the file manpower_requirements.xlsx
- an electronic copy of this introduction to the software
- email based support to help you to set up and run your customised version of the work book

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Manpower Required to run an Organisation brought to you by **Excel 2007 with Excel Master**

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